

**Docket No. 217 – Development and Management Plan Inspection**

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

**Date:** March 15, 2006

**Inspector:** Lee Curtis

**Location:** Overhead Line (Composite 345kV and 115kV Gallows Hill to Archers Lane) and (345kV H-Frame Hoyts Hill to Gallows Hill)

**Storm/**

**Rain Event:** The only recorded precipitation was 0.30" which fell over 3/12-3/14 as reported by NOAA.

Areas of Inspection	Observation	Recommended Action	Corrective Action
Access Roads and Adjacent Roadways  <b>Composite</b>	<p>- The Composite ROW work is accessible from Gallows Hill Road by an existing trail path with a swing gate, an approved access path in from the east of the ROW, an access road passing through the Archers Lane substation, and an area cleared from the station to the ROW. 3/15/06.</p> <p>-Significant clearing continues off Gallows Hill and Archers Lane access. Wood chips have been placed along the access roads, but also blown off the cleared ROW in some areas. See the vegetative clearing section for more details. 3/2-3/15/06.</p> <p>- Water levels at the 2<sup>nd</sup> wetland crossing on the access road at Archers Lane have remained low. 3/15/06.</p>	<p>- With freezing and thawing periods, additional measures for stability should be considered for access needs. If any areas still have ruts at the end of the work, it will have to be regraded to return to original conditions. 12/8-3/15/06.</p> <p>-See vegetative clearing section for details and recommendations. 3/15/06.</p> <p>- Wetlands have not returned to the previous problem causing levels. Continue to monitor. 3/15/06.</p>	<p>-N/A until evaluation at the end of work.</p> <p>-N/A at this time</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>345kV H-Frame</b>	- A skidder had slipped off the road into the 3 <sup>rd</sup> wetland area 2/16/06. Haybales had been placed but ruts in the wetland remain. 3/9-3/15/06.	- The damage should be repaired at the 3 <sup>rd</sup> wetland. See erosion control section for more details. 2/16- 3/15/06.	-Haybales were placed at the 3 <sup>rd</sup> wetland area but ruts remain. See erosion control section for more details.
	- Work along the access roads continues in the vicinity of Hoyts Hill, Chestnut Ridge Rd, Costa Lane, and John Todd Way sections. Wood chips were placed along portions of the roads. 2/16-3/15/06. -Stone dust is used on the access roads at Costa Lane and John Todd Way. 3/2-3/15/06.	- Continue to maintain as needed. 2/2-3/15/06 Monitor the conditions along the road near the wetland edge between poles #5 and 6. If muddy conditions re-occur, consider installing silt fence in this area. 2/16-3/15/06.	- N/A at this time
	-Mats are in place at the wetland locations in the Bethel Reservoir section. Watch the crossings for muddy conditions and monitor erosion controls. 2/22-3/15/06.	- Continue to provide and/or extend silt fence. See the erosion control section for details. 2/16-3/15/06.	-N/A at this time
	- A stronger crossing is planned between poles #10-11 for access to bring in the poles. 3/2-3/15/06.	- Make sure that the stream is not impacted during the construction of this new crossing. 3/9-3/15/06.	-N/A at this time.
	-There was no sediment tracking at the various road/ROW intersections. 3/9-3/15/06.	- Continue to monitor. Install stone at road access points or sweep the street as necessary. 3/9-3/15/06.	N/A at this time.
Foundation construction <b>Composite</b>	-The only current work in this section is clearing. 3/2-3/15/06.	-See erosion control and clearing sections. 3/15/06.	-N/A
<b>345kV H-Frame</b>	-All excavations for pole installation in the Bethel Reservoir and the Chestnut Ridge sections	- None at this time. 3/15/06.	-N/A

Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>are complete. 3/15/06.</p> <p>- With the exception of structure #6, all previously existing structures and wire were down for both sections. 3/9-3/15/06.</p> <p>- The wooden poles for the Reservoir Section are currently stored at Pole #10. Installation of these poles will begin when the crossing is constructed between pole#10 and #11. 3/2-3/15/06.</p> <p>- Structures #3, 4, 5 and 9 were installed along the Chestnut Ridge section. Poles #8 and 2 were being installed at the time of inspection. 3/15/06.</p> <p>-The excavations for pole installations are complete of John Todd Way. Lines have been taken down but existing poles remain along the ROW. 3/9-3/15/06.</p> <p>- The excavations for pole installations are complete for the Costa Lane section. Lines were removed from structures, but the existing poles remained at the time of inspection. 3/9-3/15/06.</p>	<p>- None at this time. 3/15/06.</p> <p>-None at this time. 3/15/06</p> <p>-None at this time. 3/15/06</p> <p>- None at this time. 3/15/06.</p> <p>- None at this time. 3/15/06.</p>	<p>-N/A</p> <p>-N/A</p> <p>N/A</p> <p>-N/A</p> <p>-N/A</p>
Erosion and Sediment Controls	<p>- Water levels appear to remain low at the 2<sup>nd</sup> wetland crossing along the Archers Lane access road. Controls were repaired and sediment removed from the 2<sup>nd</sup></p>	<p>- None at this time. 3/15/06.</p>	<p>-N/A</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<p><b>Composite</b></p> <p>Erosion controls continued</p> <p><b>345kV H-Frame</b></p>	<p>wetland crossing 2/16-3/15/06.</p> <p>- A skidder had slipped off the road into the 3<sup>rd</sup> wetland area. Haybales had been placed but ruts in the wetland remain. 3/2-3/15/06.</p> <p>- The 1<sup>st</sup> wetland crossing, immediately within the Archers Lane site before the access road opens into the ROW continues to have sedimentation remaining from road run-off. 1/26-3/15/06.</p> <p>- Wood chips had been blown into the uplands and wetland area at the third structure in from Gallows Hill Road. This is probably not a good practice as this reduces natural habitat and may smother plants. 2/22-3/15/06. A new area with deep wood chips off the cleared ROW was noted past Archers Lane. 3/15/06</p> <p>- Wood frogs are now using the wetland at the 2<sup>nd</sup> structure off Gallows Hill for breeding and multiple egg masses have already been deposited. Chorusing was also heard near the 3<sup>rd</sup> structure in from Gallows as well as the 3<sup>rd</sup> wetland at Archers. It is important to prevent sedimentation here. 3/15/06.</p> <p>- Clearing continues in</p>	<p>- Damage to the wetland should be repaired. 2/16-3/15/06.</p> <p>- In areas where sediment is substantial and feasibly removable, contractors should shovel it out carefully by hand. 3/15/06.</p> <p>- Make sure chips stay on the ROW. Contractors to should remove the off ROW chips since this is not allowed in the D&amp;M plan. 2/22-3/15/06.</p> <p>- Wood chips on the ROW can remain at a depth of 3". Deeper piles should be spread out. 3/15/06</p> <p>- The silt fence should be extended approximately 30 feet along the access road (toward the 3<sup>rd</sup> structure) in order to encompass this entire wetland area. Extending the silt fence will decrease the potential of sedimentation to this wetland. 3/15/06.</p> <p>- Continue to place</p>	<p>- Haybales were installed at the 3<sup>rd</sup> wetland in place of the damaged controls but the ruts in the wetland remain.</p> <p>- Wood chips were</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
Chestnut Ridge Section	the Chestnut Ridge section. Continue to provide good controls at the wetlands. Wood chips were installed at the access road between poles #5 and 6. Wetlands are adjacent but conditions were not muddy at the time of inspection. 3/15/06.	controls at all four “corners” of the approach to the mats and crossings. Watch for increasingly muddy conditions on the mats and install silt fence along the road as needed. Monitor the portion of access road between poles #5 and 6. If muddy conditions re-occur, consider installing silt fence here. 2/16-3/15/06.	installed along the access road between poles 5-6
	-The silt fence at the pasture near pole #7 was weakening due to wind damage. 3/15/06.	-Consider installing additional stakes to increase the stability of the silt fence in this area. This particular section is often exposed to strong winds. 3/15/06.	-Fence is inspected regularly.
	- A portion of the sediment near structure #6 has been removed. Continue to work on the remainder as the pile is in a wetland area. 2/22-3/15/06. An additional temporary stockpile associated with pole excavation has been placed in this area, upgradient of the silt fence. This pile is temporary and will be removed after the structure is installed. 3/15/06.	- Remove the soil here as soon as conditions can support this without further impact. 2/22-3/15/06.  -Monitor the temporary stockpile and install additional erosion controls if necessary. Remove this pile as soon as feasible. 3/15/06.	-N/A until conditions are stable.
	- The stockpile from structure #9 foundation installation was still present. The silt fence here has a gap in coverage. 1/26-3/15/06.  - Silt fence and mats remain in place in a number of locations in	- The stockpile should be removed as soon as feasible to prevent run-off to the road. 2/16-3/15/06.  - Continue to monitor for any muddy conditions or need for repairs. 3/15/06	- N/A at this time. 3/15/06
Bethel Reservoir Section to Chestnut Ridge Rd.			

Areas of Inspection	Observation	Recommended Action	Corrective Action
Costa Lane and John Todd Way	<p>this section. 3/15/06</p> <p>-Mats have been installed at the wetland crossing in the vicinity of pole #28. 3/2-3/15/06.</p> <p>-Silt fence has been installed around the stockpile area near structure #30. 3/15/06</p> <p>-Structure #24 off John Todd Way is adjacent to a large wetland system. Silt fence has been installed properly in this area. 3/15/06.</p>	<p>-Continue to monitor the crossing for increasing muddy conditions and install silt fence at the four corners to prevent further sedimentation. 3/2-3/15/06.</p> <p>-Continue to monitor the erosion controls in this area and remove the stockpile when feasible. 3/15/06.</p> <p>- Continue to monitor and maintain the erosion controls in this area due to its proximity to the wetland. 3/9-3/15/06</p>	<p>-N/A</p> <p>-N/A at this time</p>
<p>Inland Wetland and Watercourse encroachment and mitigation</p> <p><b>Composite</b></p>	<p>-The D&amp;M plan approved stone on geotextile fabric at the wetland crossings had worked well, but at three areas near Archers Lane, turbidity issues have been present. Run-off from the road, the drainage pipe, and snow plow issues had led to sedimentation. 1/4-3/15/06.</p> <p>- Direct damage was noted to the wetland at the 3<sup>rd</sup> crossing as a result of equipment slipping. 2/16-3/15/06.</p> <p>- The rocks at the 1<sup>st</sup> crossing remain clogged with sediment and noticeable deposits were in the wetland. 1/4-3/15/06.</p> <p>- Use caution in removing trees from</p>	<p>- As the access is considered temporary, the stone will be removed when final work ends so the wetlands can be restored. 1/26-3/15/06.</p> <p>- The damage to the 3<sup>rd</sup> wetland should be repaired. 3/15/06.</p> <p>- The 1<sup>st</sup> crossing could also use some clean stone. Sediment will have to be carefully removed. 1/4-3/15/06.</p> <p>- Retain shrubs and low growth as much as</p>	<p>-N/A until evaluated at the end of work.</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
<b>345kV H-Frame</b>	<p>wetland areas. Avoid creating ruts when skidding them out. Clearing was noted along the wetland near Gallows Hill. 3/2-3/15/06.</p> <p>- Wood chips were noted in the wetland off ROW near the 3<sup>rd</sup> structure in from Gallows Hill 3/15/06</p> <p>- Use caution in removing trees from wetland areas or adjacent to streams in this section as well. Avoid creating ruts when skidding them out. 1/19-3/15/06.</p> <p>- Some brush was piled in the wetland between pole #6-7 due to the clearing activities. 2/16-3/15/06.</p> <p>-A significant amount of brush was also noted within the wetland at Costa Lane near structure #28. 3/2-3/15/06.</p> <p>- At the excavation for proposed structure #6, some of the mud was removed from the wetland but they will continue to do so. 3/2-3/15/06.</p>	<p>possible. 3/2-3/15/06.</p> <p>- If damage is noted during the spring, the previously created ruts should be repaired if possible. 3/9/06-3/15/06.</p> <p>-See vegetative clearing section for more details. 3/15/06.</p> <p>- Try to leave shrubs and low growth where possible, especially at stream buffers. 2/2-3/15/06.</p> <p>-Carefully remove brush piles and trees from wetland areas. 2/16-3/15/06</p> <p>-Carefully remove brush piles and trees from wetland areas. 3/2-3/15/06.</p> <p>- The entire pile should continue to be pulled back/removed and controls reinstalled closer to the pole. Conditions may be too muddy at this time. 2/16-3/15/06.</p>	<p>-N/A at this time</p> <p>-A portion of the mud was removed from the wetland near structure #6. 3/2/06.</p>
State species of concern, threatened and endangered species	<p>- The composite portion of overhead work includes state-listed turtle habitat area. 9/15-3/15/06.</p> <p>-The Eastern box turtle has not been observed since the first sighting and is likely hibernating. 3/15/06.</p>	<p>-Turtles would no longer be active at this time of year. However as weather gets warmer, recommence daily walkthroughs. 3/15/06.</p>	<p>-N/A at this time</p>

Areas of Inspection	Observation	Recommended Action	Corrective Action
Vegetative clearing limits (including trees to save or danger trees noted)	-Significant clearing was noted in the composite section near Gallows Hill Rd. This includes work in wetlands. Adjacent homeowners mentioned damage to mountain laurel and other shrubs. 3/2-3/15/06.	-In general, take care in retaining shrubs and use mats to access or skid out trees from wetlands. 2/22-3/15/06.	
<b>Composite</b>	-The wetland area at the 2 <sup>nd</sup> structure is now being used as breeding habitat by wood frogs. A portion of this wetland was previously cleared and shrubby brush and larger limbs remain within. 3/15/06.	-Although it is likely that this brush will eventually need to be removed from the wetland, further investigation is needed to determine how removal will affect the species currently breeding here (i.e. egg masses may be attached to existing brush). 3/15/06.	-N/A until further investigation is complete.
	- A significant amount of chips were blown off the ROW into the upland and also along the wetland edge at the 3 <sup>rd</sup> structure off Gallows Hill. This could smother plants and reduce habitat. 2/22-3/15/06.	- Chips currently off ROW boundaries should be removed carefully to comply with the D&M plan. 2/22-3/15/06. Chips on ROW should be spread to a depth of 3". 3/15/06	- CL&P is looking into this.
	-This was also noted several structures past Archers Lane. 3/15/06		
	-Clearing continues along the ROW at Archers Lane and a number of trees are marked for removal in a wetland which also serves as amphibian breeding habitat. 3/15/06.	- To avoid wetland damage, the trees will be sheared from the access road and felled out of the water. 3/15/06	- CL&P proposed the work under these specs.
<b>345kV H-Frame</b>	-Significant clearing continues along the Chestnut Ridge Rd, Costa Lane, and John Todd Way sections. Wood chips were placed along portions of the	- Chips spread on the ROW should be spread to a depth not more than 3" by the time the growing season is about to begin. 3/15/06.	-N/A at this time



Areas of Inspection	Observation	Recommended Action	Corrective Action
	<p>roads. 2/16-3/15/06.</p> <p>-Large branches and brush were noted in wetlands and stream areas in a number of locations. 2/9-3/15/06.</p> <p>-In all sections make efforts to retain shrubs, especially in wetland areas. Efforts have been noted in some areas but could have improved in others. -3/15/06.</p>	<p>- Carefully remove any larger branches or brush strewn in streams and wetlands which are not currently being used for amphibian breeding habitat 3/15/06.</p> <p>Keep clearing to what is necessary. The D&amp;M plan states low growing shrubs can remain. 12/22-3/15/06.</p>	
Dewatering	<p>- Dewatering had occurred at structure #6. Water appeared to be running clear beyond the controls installed. No additional sediment was noticed beyond the controls in this area. 3/9-3/15/06.</p>	<p>- Release water to the ground only in well vegetated areas if it will not reach any resource areas. (Make sure to check downgradient for these areas) Otherwise use a filter bag or adequate containment. 3/9-3/15/06.</p>	<p>-Silt fence and hay bales were used properly for this dewatering.</p>
Blasting	<p>-No blasting has been necessary at this time on the ROW. 3/15/06.</p>	<p>-None at this time. 3/15/06.</p>	<p>-N/A</p>
Spills and Material Storage	<p>-None of the parked or active equipment was leaking at the time of inspection, but there was an old spill noted on the access road between the 2<sup>nd</sup> and 3<sup>rd</sup> structure in from Gallows Hill. 3/15/06</p> <p>- Poles were also noted stored in the wetland area between poles 5-6. Avoid creating ruts when removing these for installation and avoid future storage in wet areas 3/15/06</p>	<p>-Clean the affected area and investigate the source of the fuel leak. 3/15/06.</p> <p>- Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they will be used or stored on site</p> <p>- Keep adequately size fuel kits for worst case scenarios.</p> <p>- Report spills immediately, even if they are being controlled.</p> <p>- Take care not to get carried away and to be vigilant when refueling. Avoid refueling in the areas near the wetlands. Use proper storage for all materials.</p>	

Areas of Inspection	Observation	Recommended Action	Corrective Action
Additional Observations			

**Next likely scheduled inspection:**

Thursday March 23, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

**Inspector's Signature:**

Diana Walden for Lee Curtis

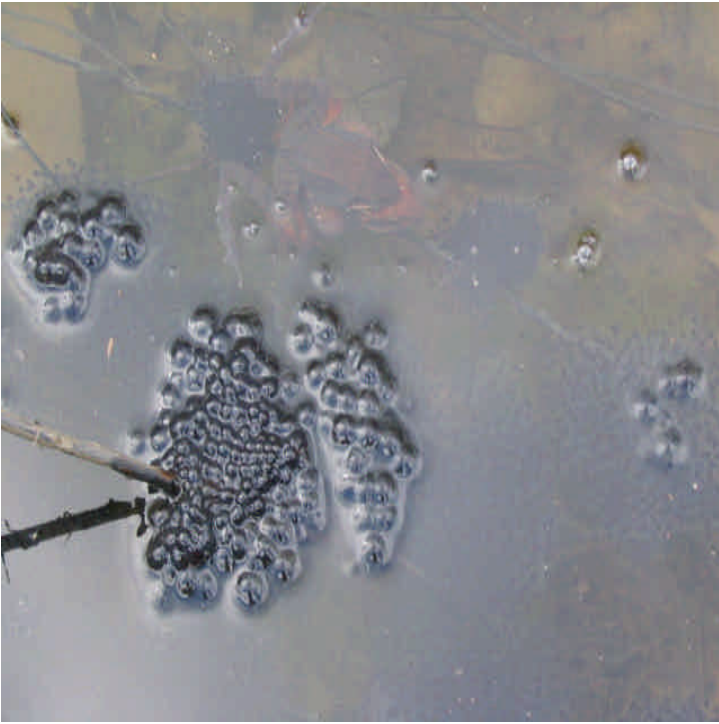


(Composite Section-Archers Lane): Photo on the left shows a view of the 3<sup>rd</sup> crossing at Archers Lane where the skidder slipped off the road. Haybales have been placed but ruts remain in the wetland. Photo on the right shows a general view of the third crossing where trees are marked for clearing. 3/15/06



Both photos show the excess wood chips that have been blown off the cleared ROW into an undisturbed upland area. Photo on the right demonstrates that the wood chips were spread at a depth greater than three inches. CL&P is looking into a solution here. 3/15/06.





**(Composite Section-Gallows Hill):** Photo on the left shows a view of wood frog egg masses found throughout the wetland located near the 2<sup>nd</sup> structure. Photo on the right shows the portion of the wetland where erosion controls should be extended to prevent sedimentation to this breeding habitat. 3/15/06.



**Photo on the left shows cleared portions within this same wetland. Both photos show brush deposited within and along the edges of this wetland. 3/15/06.**





**Photo on the left shows a view of the wood chips that have been blown off the cleared ROW and along the edge of the wetland near structure #3. Photo on the right shows one of the areas where blown chips have reached the wetland. 3/15/06.**



**Photo on the left shows a view of the wood chips blown off the cleared ROW into the undisturbed upland area located on the opposite side of the ROW from the wetland shown above. Photo on the right shows a small fuel stain located between structures #2 and #3. 3/15/06.**





**(345kV H-Frame):** Photo on the left shows structure #8 being installed along the Chestnut Ridge section. Photo on the right shows the area used for dewatering at structure #6. No sediment has migrated beyond the erosion controls. 3/15/06



Photo on the left shows the temporary stockpile stored near structure #6. This pile should be removed as soon as pole installation is complete. Photo on the right shows the area of access road between poles #5 and 6 which was placed with chips. Poles were accidentally stored in wetland; use caution when removing them for installation. 3/15/06





**Photo on the left shows the stone dust access road off John Todd Way approaching structure #24.  
Photo on the right shows a view of the repaired erosion controls adjacent to the wetland here.  
3/15/06**



**Photo on the left shows the crossing off Costa Lane near structure #28. Silt fence should be installed at the four corners of this crossing. Photo on the right shows the erosion controls installed around the stockpile and pole excavations at structure #30. 3/15/06**